

AMENDMENTS TO THE CLAIMS

Claims 1-17 (Canceled)

Claim 18 (New) A ray cut filter, comprising:

a transparent plate; and

a multilayer film formed on said transparent plate, wherein:

said multilayer film is composed of first thin films made of a high refractive index material and second thin films made of a low refractive index material,

said first thin films and said second thin films are alternately layered,

said multilayer film is structured so as to form a sharpness preventing means for providing an inflection point at a wavelength, within a change wavelength band in which transmittance changes sharply, which prevents a sharp change in transmittance in a predetermined wavelength band, and

said multilayer film is a layered structure composed of a plurality of layers, each of which is composed of said first and second thin films such that optical film thicknesses of said first thin films and said second thin films differ from layer to layer of said plurality of layers such that said layers have thicknesses different from that of each other,

wherein said sharpness preventing means comprises optical film thicknesses of each thin film of said first and second thin films having substantially the same optical film thickness in at least one of said plurality of layers, and wherein said first and second thin films have optical film thicknesses which gradually increase between others of said layers with distance from said transparent plate,

wherein said sharpness preventing means further comprises at least one adjustment layer provided at at least one location between said layers and on both ends of said layered structure so as to prevent an amount of change in transmittance from changing sharply between said layers.

Claim 19 (New) The ray cut filter of claim 18, wherein said plurality of layers include a first layer, a second layer and a third layer which increase in thickness sequentially with distance from

said transparent plate, and wherein said first and second thin films have substantially the same optical film thickness in said second and third thin films.

Claim 20 (New) The ray cut filter of claim 18, wherein said plurality of layers include a first layer, a second layer and a third layer which increase in thickness sequentially with distance from said transparent plate, and wherein said first and second thin films have substantially the same optical film thickness in said first and third thin films.

Claim 21 (New) The ray cut filter of claim 18, wherein said multilayer film corresponds to a wavelength band from the visible region to the infrared region and is formed on one side of said transparent plate, and a second said multilayer film corresponding to a wavelength band from the ultraviolet region to the visible region is formed on the other side of said transparent plate.

Claim 22 (New) The ray cut filter of claim 18, wherein the optical film thicknesses of said first and second thin films differ by a small amount in said at least one of said plurality of layers having substantially the same optical film thickness.

Claim 23 (New) The ray cut filter of claim 19, wherein the optical film thicknesses of said first and second thin films differ by a small amount in said at least one of said plurality of layers having substantially the same optical film thickness.

Claim 24 (New) The ray cut filter of claim 20, wherein the optical film thicknesses of said first and second thin films differ by a small amount in said at least one of said plurality of layers having substantially the same optical film thickness.

Claim 25 (New) The ray cut filter of claim 21, wherein the optical film thicknesses of said first and second thin films differ by a small amount in said at least one of said plurality of layers having substantially the same optical film thickness.